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UNIVERSITY OF ALBERTA

PARENT STRESS AND PARENT IRRATIONAL BELIEFS: MOTHER-FATHER DIFFERENCES

BY

TIMOTHY J. STARKO

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

AND RESEARCH IN PARTIAL FULFILMENT OF THE

REQUIREMENTS OF THE DEGREE OF

MASTER OF EDUCATION

IN

COUNSELLING PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1991

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UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "Parent Stress and Parent Irrational Beliefs: Mother-Father Differences" submitted by Timothy J. Starko in partial fulfilment of the requirements for the degree of Master of Education in Counselling Psychology.

P. Calder

J. Blakey

G. Kysela

Date: August 12, 1991

DEDICATION

This thesis is dedicated to the memory
of my father
Dr. Peter Starko
who always set an example of
hard work, sincerity and faith
in everything he did.

ABSTRACT

This thesis examined the relationship between parent irrational beliefs and stress for both mothers and fathers. Objectively derived measures of parent stress (Parenting Stress Index (PSI), Abidin, 1986) and parent irrational beliefs (Parenting Irrational Belief Scale (PIBS), Ackerman, 1991) were obtained from 23 couples with children 3 years of age and younger.

The results indicated that a significant relationship exists between mothers' stress and irrational beliefs (r=.40). This supports previous research by Ackerman (1991) with mothers. This study included the first sample of fathers to complete the Parenting Irrational Belief Scale. The significant correlation of .63 between the PIBS and PSI for fathers indicates that the relationship also exists for fathers. There were no significant differences between mothers' and fathers' scores for the couples in this sample.

The areas of parent stress that are the most related to parent irrational beliefs are sense of competence, depression and restriction of role. The parental irrational beliefs surrounding worry ("I constantly worry that I will make a terrible mistake as a parent") and need for perfection ("If I am not a perfect parent then I am a failure") have the most influence over a parent's level of stress.

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CHAPTER 1

INTRODUCTION

Overview of the Problem

Parenthood brings with it new roles, responsibilities and personal growth. It is a challenge that taxes couples in all facets of their life. It has been termed a crisis (Le Masters, 1957; Dyer, 1963) and referred to as a transition (Hobbs, 1968). Regardless of the terminology used to describe parenthood it affects couples' lives in many positive and negative ways. The possibility therefore exists for difficulties to arise in the lives of married couples who have children.

Various theories have been used to explain why the events of our lives are more difficult for some people than for others. The theories range from biological and psychodynamic to behavioral and cognitive. The consequences are described in terms as varied as those from the realm of abnormal psychology to layman terminology. This thesis shall examine one life event: parenthood; one consequence: stress; and one theoretical perspective to account for it: cognition.

This thesis shall not treat parenthood as a unitary phenomenon but shall examine and compare its affects on both mothers and fathers separately. The cognitive model that will be used is Albert Ellis' (1962) theory of irrational

beliefs. Objectively derived measures of parents' irrational beliefs (Ackerman, 1991) and parent stress (Abidin, 1986) will be obtained.

This thesis builds upon research that shows there is a relationship between mothers' irrational beliefs and stress (Ackerman, 1991). Further validation of that relationship and establishing whether it also exists for fathers can provide counsellors with a possible therapeutic framework (rational emotive therapy) which could be applied to both mothers and fathers.

An examination of irrational beliefs and levels of stress held by mothers and fathers in specific domains such as parenting can help professionals to be sensitive to differences that may or may not exist. This could have implications for ways of understanding and working with parents more effectively.

The Problem Under Investigation

In this study a sample of married couples with children three years and under will be used. The couples are those who brought their children into one of four baby clinics in the City of Edmonton. Parents were requested to fill out a questionnaire that contains a measure of irrational beliefs (Parenting Irrational Belief Scale), parental stress (Parenting Stress Index) as well as demographic variables.

The Parenting Irrational Belief Scale (PIBS) has been

designed by Ackerman (1991) based on Albert Ellis' (1962) theory of irrational beliefs. It contains two irrational beliefs related to parenting for each of Ellis' eleven irrational beliefs.

The Parenting Stress Index (PSI) (Abidin, 1986) measures many areas in both the parent and child domains that have been shown to be associated with stress. Total scores will be obtained as well as scores on the child and parent domains and their subscales.

By obtaining scores on both the PIBS and the PSI for both parents the relationship between the scales and difference between mothers and fathers will be examined.

Purpose of the Study

The purpose of this study is to determine the general relationship between couples' irrational beliefs and their level of stress. Next, the relationship between irrational beliefs and stress were examined for mothers and fathers separately. Thirdly, the irrational beliefs and levels of stress for mothers were compared with those of the fathers.

Limitations of the Study

This study is restricted to the Edmonton area. Generalizations to other subjects would have to be done with caution.

Also, the subjects who completed the questionnaires

were volunteers and were therefore not randomly chosen. Thus, this sample may not be fully representative of the population. Parents bringing in children to the particular clinics may have different attitudes towards child-rearing from those who choose not to.

Further, the quality of the couples' relationship may not be reflective of the general population since the couples who chose to participate are willing and able to communicate and coordinate their activities. This might be indicative of more cooperation in these homes than exists in other households.

Another area of possible response bias is that parents were not directed by the personnel at the clinic to complete the questionnaire. Therefore, those who chose to take a questionnaire may be more motivated and outgoing requiring less direction from other people. Those people who are more inhibited or who may have been depressed might not have taken the initiative.

When there was more than one child in the family, parents were requested to answer the questionnaire about the child who caused them the most concern. Some couples chose to answer about different children. Therefore, discussion of the differences between mothers and fathers have to be made with caution.

The sample size does not lend itself to multivariate techniques. The use of multiple T-tests increases the

possibility of a Type I error, and the use of large correlation matrices could result in an over interpretation of the findings. Therefore, conclusions drawn need to consider this factor.

The PIBS relies on a self-report questionnaire which assumes that parents' irrational beliefs are accessible.

Definitions

1. Stress: The phenomenon as measured by the PSI is based on the following assumptions: Stress is a measure of life events which encompass three domains: child characteristics, parent characteristics and situation/demographic life stress. These sources of stressors are additive (Abidin, 1986).

2. Irrational Belief: This is a belief that is not supported by empirical evidence and is not appropriate for the event that may or may not be occurring. It may also be referred to as a maladjustment-creating philosophy (Ellis, 1973).

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

In this chapter the literature pertinent to this study is examined. Firstly, stress will be discussed. This will be followed by parenthood as a stressor. Research conducted with the Parenting Stress Index shall then be examined. These sections investigate the literature as it relates to both mothers and fathers.

Albert Ellis' theory of Irrational Beliefs as an intervening variable between a stressor and the experience of stress will then be addressed.

Research on the validity of Ellis' theory, gender effects and the relationship between parenting irrational beliefs and stress will all be examined.

Stress

The concept of stress in a modern context was brought to the public's attention by Hans Selye. In 1936 Selye discussed what he called the "general adaptation syndrome (G.A.S)" which was a reaction of the body to any noxious agents. Selye initially called it an alarm reaction but later added two more stages: the stage of resistance and the stage of exhaustion (Selye, 1956).

In 1956 Selye defined stress as "the state manifested

by a specific syndrome which consists of all the non-specifically induced changes within a biologic system" (p. 64). Thus stress became something that could be measured biologically (by measuring the G.A.S) without reference to a particular cause. The agent or cause of stress is a stressor. The magnitude of the stressor would be "the amount of non-specific demands and changes (or stress) the stressor produces" (p. 78-79).

Interest in stress expanded out of Selye's research and his formation of the International Institute of Stress. Workers in the fields of biology, psychology and sociology worked in many areas to better understand stress. Physicians studied the physiological aspects of stress, sociologists studied the stressors themselves and psychologists studied the link between the two. This lead to a variety of definitions that differed from Selye's concept lending confusion to the field. Lazarus (1966), rather than trying to define stress, proposed a description for the field of stress as "a generic term for the whole area of problems that include the stimuli producing the stress reactions, the reactions themselves and the various intervening variables" (p. 27).

This discussion shall focus on one stimulus or stressor said to produce stress: parenthood, and one intervening variable: irrational beliefs.

Parenthood as a Stressor

Hill (1949) postulated a number of stressors which could lead to family stress or "crisis". One of these events was the accession or addition of a member to the family (e.g baby, stepmother, stepfather). Hill defined a crisis as "any sharp or decisive change for which old patterns are inadequate" (p. 51). Hill said this would be followed by disorganization of the family, then by a period of recovery and finally a period of reorganization.

LeMasters (1957) tested Hill's hypothesis and found that for eighty three percent of the couples in his sample parenthood constituted a crisis event. Dyer (1963) in a similar study concluded with LeMasters that parenthood represents a crisis. Eighty percent of both husbands and wives said that things were not as they expected them to be after the birth of their child. One difference noted between mothers and fathers after the birth of a child was that fifty per cent of the husbands felt they were neglected by their wives for the baby. However, only twelve percent of wives felt their husbands neglected them for the baby.

While both the LeMasters and Dyer studies have been criticized for having small unrepresentative samples (middle-class families only), and for the use of the term "crisis" (Miller & Sollie, 1980), they did bring to researchers' attention the importance of studying the effects of parenthood.

Hobbs (1965) studied the question of parenthood as crisis and produced findings very different from LeMasters and Dyer. In Hobbs' sample 87 percent of the couples experienced parenthood as a slight crisis and 13 percent as a moderate crisis. Hobbs found that mothers' and fathers' crisis scores differed significantly with mothers being higher. He also found differences on individual items for mothers and fathers. For mothers the highest factors contributing to stress were interference from in-laws and decreased sexual response. For fathers the highest factors causing stress were money problems and feeling edgy or emotionally upset.

Hobbs (1968) replicated his study and produced similar results. He suggested conceptualizing beginning parenthood as a "period of transition that is somewhat stressful" (p. 417) rather than a crisis.

Research throughout the seventies produced findings similar to Hobbs (Russell, 1974; Hobbs & Cole, 1976). Russell (1974) found a significant difference in husbands' and wives' crisis scores (wives' scores were higher) and wives chose more items to do with the emotional and physical self. Husbands checked items external to the physical or emotional self such as increased money problems.

Miller and Sollie (1980) found that perceived personal stress (or feelings of being tied down or that life is hard rather than easy) increased for both mothers and fathers but

it was greater for mothers. They also found that marital stress increased more for mothers than fathers. These results were supported by a similar study by Cooper Harriman (1983) who concluded that parenthood has a greater impact on the lives of wives rather than husbands in all areas (personal, physical and emotional).

A study by Ventura (1987) that focused on stress as it relates to changing social roles found results similar to previous studies with some additional sources of stress. Ventura concluded that women experience more stress as a result of working while trying to be a wife and mother. This led to mothers feeling more stress than fathers with regards to infants's fussy behaviours. Lewis and Cooper (1988) in a study of dual income families also found that the women felt more pressure than the men.

Cowan and Cowan (1988) found that the less men were involved in family roles the more dissatisfied their wives were. In contrast, the level of their involvement did not affect the fathers' satisfaction. This would imply that women are more apt to feel stress over parental roles.

From the literature presented thus far parenthood can be seen as a transition that brings with it its own stressors. The experience of stress is greater for wives than husbands in all studies cited. Belsky (1986) summarized four stressors in the transition to parenthood: physical demand of caring (greater for mothers), strain in

husband-wife relationship, emotional costs and personal confinement.

The Parenting Stress Index and Mothers and Fathers

Research with the Parenting Stress Index (PSI) has primarily been conducted with mothers. In studies including both mothers and fathers the couples have more often been parents of handicapped children.

When Abidin (1986) examined the norms from the PSI he concluded in the absence of statistical analysis that the norms "suggest that fathers earn significantly low stress scores on all components of the PSI when compared to mothers" (p. 13). A T-test for the significance of the difference between two means for independent samples was conducted for the total stress score; the difference was significant at .001. This is based on a sample of 100 fathers from the original norm group which also included 434 mothers. The norm group consisted of parents of normal children and parents of children with problems in behaviour or health. All parents were those who brought their children to pediatric clinics in central Virginia.

In a study comparing mothers and fathers of mentally handicapped preschoolers, Reddon (1989) found that fathers' total scores were lower than mothers but the difference was not significant. The same applied to the subscales of the PSI.

Kozak and Marvin (1984), in a study comparing parents of handicapped (spina bifida) and non-handicapped children, obtained results which were similar to those of Reddon. Kozak and Marvin found that mothers of handicapped children experienced more stress than did the fathers in comparison to the non-handicapped parents.

Some studies have found significant differences. Holden, Willis and Foltz (1989) found that fathers scores' were lower than mothers' on the PSI for four groups of maltreating parents. Webster-Stratton's (1988) study examining children with conduct disorders found that fathers' scores were lower than the mothers' for the total score, child domain, parent domain and all of the subscales. They were not lower for isolation, adaptability and acceptability which were not significant. One exception to the above was the attachment subscale which was higher for mothers than for fathers.

In all of the studies mentioned fathers scored lower than mothers on the PSI. For parents of handicapped children the difference was not significant. However, for maltreating parents and parents of children with conduct disorders the differences were significant. The significant difference for the PSI norm group is hard to interpret because the percentage of parents in the sample who were referred to clinics for health or behaviour problems is not given.

Based on this information one could predict that fathers will score lower than mothers on the PSI.

Albert Ellis' Theory of Irrational Beliefs

The basic tenet of Ellis' theory is that the reactions (behavioral or emotional) which people experience are not a direct result of the event itself but a result of the way they interpret the event. Ellis (1977) is quick to point out that he was not the originator of this view but only one of several who have made it popular since 1955. He credits the ancient Greek and Roman stories (Epictetus and Marcus Aurelius) as the founders of this train of thought.

Ellis (1977) describes his theory in an ABC framework. A is an Activating experience or activating event; B is one's innately predisposed and learned or acquired Belief system. C is an emotional or behavioral Consequence. An example of this sequence is: A - a failed exam; B - I have to pass all my exams to be worthwhile; C - I am no good as a person; I am stupid. In this example the belief causes the person to be depressed. If the person held the belief that failing an exam is human and one could never expect to pass all the exams written then the person might not become depressed by a failure. The person might also realize he/she needs to work harder on the next exam rather than give up.

Thus Ellis' theory would state that it is the person who

causes the emotional consequences by his/her belief (either rational or irrational) and it is not the activating event. Rational beliefs (rb's) lead to self-helping behaviours and irrational beliefs (ib's) lead to self-defeating behaviours (Ellis & Bernard, 1986). People use irrational beliefs because it is the way they "naturally and easily tend to think" (p. 16). The irrational beliefs may also be learned from parents, teachers and others. Ellis (1962) contends that people are "uniquely rational as well as uniquely irrational and can rid themselves of emotional unhappiness by maximizing rational and minimizing irrational thinking" (p. 36.)

Throughout the development of Ellis' theory of irrational beliefs he has proposed various classifications of the irrational beliefs that people hold. The eleven which he originally proposed (1962) are listed below:

1. It is a dire necessity to be loved or approved by almost everyone for virtually everything one does.
2. One should be thoroughly competent, adequate, and achieving in all possible respects.
3. Certain people are bad, wicked or villainous and should be severely blamed and punished for their sins.
4. It is terrible, horrible, and catastrophic when things are not the way one would like them.

5. Human unhappiness is externally caused and people have little ability to control their sorrows or rid themselves of their negative feelings.
6. If something is, or may be, fearsome or dangerous, one should be terribly occupied and upset about it.
7. It is easier to avoid facing many of life's difficulties and responsibilities than to face and undertake them.
8. The past is all important and because something once strongly affected one's life, it should continue to do so indefinitely.
9. Things and people should be different from the way they are and it is catastrophic if perfect solutions to the grim realities of life are not found.
10. Human happiness can be achieved by inertia and inaction or by passively and uncommittedly enjoying oneself.
11. One needs something other, or stronger, or greater than oneself on which to rely (p. 60-88).

Ellis (1977) simplified the classification of irrational beliefs by saying that they take one or more of four basic forms:

1. You think that someone or something should, ought or must be different from the way it actually

does exist.

2. You find it awful, terrible, or horrible when it is this way.
3. You think you cannot bear, stand or tolerate the person or thing that you concluded should not have been as it is.
4. You think that you or some other person (or people) have made or keep making horrible errors and that because you or they must not act the way they clearly do act, you or they deserve nothing good in life, merit damnation, and can legitimately receive the label of louse, rotten person, or turd (p. 10).

Recently Ellis (1987) classified irrational beliefs into the following four categories (a) irrational beliefs about competence and success; (b) irrational beliefs about love and approval; (c) irrational beliefs about being treated fairly; (d) irrational beliefs about safety and comfort.

Ellis' theory of irrational beliefs was postulated for its value as a therapeutic tool called the Rational Emotive Therapy (RET). RET (Ellis, 1977) adds components D and E to the already discussed A-B-C model. D refers to Detecting irrational beliefs and disputing them which is achieved by debating, discussing and defining them. The result of this is a new Effect (E) which is a new philosophy. The new Effect could be cognitive (cE), emotive (eE) and/or

behavioral (bE). Research dealing with D and E shall be examined next.

Rational Emotive Therapy and Research

According to Ellis' theory, people with more irrational beliefs should experience higher levels of stress. Muldary (1983) contends that one's irrational beliefs can impair the appraisals of situations and lead to the experience of stress. Janzen, Patterson and Blashko (1989) recommend the practice of examining one's irrational beliefs in the treatment of stress.

A number of researchers have found positive relationships between one's irrational beliefs and distress. They also reported success with the use of RET in the treatment of psychological disorders (Bard, 1973; Diguiseppe & Kassinove, 1976; D'Zurilla, Wilson & Nelson, 1973; Goldfield, Decentecea & Weinberg, 1974; Goldfield & Sobocinski, 1975). Goldfield and Sobocinski (1975) found that people who were high in irrational beliefs as measured by the IBT were more positively correlated with forms of social-evaluative anxiety (social, test and speech) than those who scored low in irrational beliefs.

More recently Smith (1983) found changes in beliefs (The Idea Inventory) and measures of anxiety as a result of RET. Vestre and Burnis (1987) found a positive relationship between irrational beliefs (The Idea Inventory) and the

impact of stressful life events.

Deffenbacher, Zwemer, Whisman, Hill and Sloan (1986), in a study using the Irrational Beliefs Test and various measures of anxiety, found that different beliefs were related to different anxieties. For example, those fearful of negative evaluation believed they must have approval of significant others and be perfect in order to be worthwhile.

Not all of the research regarding irrational beliefs has been positive. Smith, Boaz and Denney (1984) noted that the relationship between life changes and psychological distress was not influenced by the endorsement of irrational beliefs. Smith, Houston and Zurawski (1984) found that the IBT did not improve measures of distress beyond measure of more "parsimonious" constructs.

The above findings have lead researchers to question the value of research relating measures of irrational beliefs and distress. They have criticized the research on the grounds of limited discriminant validity (Smith, 1982; Smith & Zurawski, 1983; Zurawski & Smith, 1987). Measures of irrational beliefs have been found to be equally highly correlated with various measures of distress, anxiety and depression. Thus irrational belief scales may be measuring general emotional distress.

The use of irrational belief scales has also been criticized on the ground that it assumes that people's beliefs are accessible for self-reports (Smith, 1982).

Nisbett and Wilson (1977) question whether people have access to higher order cognitive processes. Kendall and Korgeski (1979) conclude that people may not be able to endorse beliefs because of lack of self knowledge. Finally, Bernard (1981) argues that these scales may be too directive to allow self discovery.

Thus, while research suggests that there is a relationship between measures of irrational beliefs and measures of distress, interpretations should be cautioned because of problems with discriminant validity and use of self-report measures.

Gender Effects and Irrational Thought

While most of the research has studied males and females as a unitary group some studies have examined gender effects. Deffenbacher, Zwemer and Whisman (1986) found no sex differences in predicting anxiety using results from the Irrational Belief Test. Davison, Feldman and Osborn (1984) noted no sex differences with irrational belief scores for articulated thoughts.

Miller and Kirsch (1987), in a review of the literature on irrational thoughts and cognitive distortions, concluded that there were very few gender effects. Therefore, there may not be a difference between the irrational thinking of males and females.

Parents' Irrational Beliefs and Stress

Ackerman (1991) noted that the research in irrational beliefs and parenting stress had not been done. She designed the Parenting Irrational Belief Scale (PIBS) in the hope that a specific scale would increase clinical validity and address the problem of discriminant validity discussed earlier. Research making use of the PIBS and Parenting Stress Index (PSI) will be discussed below.

A study by Langford (1988) made use of the PIBS and three subscales of the parent domains of the PSI (sense of competence, social isolation and relationship with spouse). The sample consisted of 80 mothers living in a suburb of Edmonton who had children aged 15 years and younger. They were randomly selected from the general population and visitors to a resource centre for parents. Langford found negative correlations between the mothers' sense of competence and irrational beliefs (-.41) and between the relationship with their spouse and irrational beliefs (-.33). These correlations indicate that the lower the feeling of competence or the weaker the spousal relationship the more irrational beliefs the mothers held. Langford found a positive correlation between irrational beliefs and social isolation (.48). This correlation indicates that the mothers who were more socially isolated reported more irrational beliefs.

A study conducted by Ackerman (1991) employed the PIBS

and the PSI. The sample consisted of 129 mothers who visited 10 Edmonton Public Health Centres located throughout the city of Edmonton. All mothers had children 3 years of age or younger. Correlations between the PIBS total score and the PSI were .47 for the PSI total score, .40 for the child domain and .51 for the parent domain. The child demandingness and hyperactivity subscales of the child domain were correlated .37 and .42 respectively with the PIBS total scores. Positive correlations between parent domain subscales and the PIBS were as follows: depression (.48), competence (.48), social isolation (.45), relationship with spouse (.39) and parent restriction (.39). These findings are consistent with the previous results reported.

While evidence suggests a strong relationship between parenting irrational beliefs and stress exists for mothers no research to date has examined the relationship for fathers.

Questions for Research

The following are general questions for research based on the literature review.

1. What is the degree of the relationship between irrational beliefs as measured by the PIBS and parental stress as measured by the PSI for the parents as a couple, and for mothers and fathers

separately?

2. To what degree is there a difference between the correlations for mothers and fathers as measured in the above question?
3. To what degree is there a difference between mothers' and fathers' total scores on the PIBS and PSI?
4. To what degree is there a difference between mothers' and fathers' scores on the PSI subscales and PIBS irrational beliefs?

CHAPTER 3

METHODOLOGY

Introduction

In this chapter the research design is presented for this thesis. A description of the procedure, sample, measures, research questions and analysis of the data are given.

Research Design

The research paradigm for this thesis is quantitative in nature. The design is correlational and comparative. Correlations are obtained between the Parenting Stress Index (PSI) and Parenting Irrational Beliefs Scale (PIBS). T-Test comparisons of scores and correlations are made between males and females.

Procedure

Four health clinics in the Edmonton area participated in the research. Couples were volunteers with children under the age of three who were willing to complete the questionnaire that contained the PIBS and PSI measures as well as demographic data. Also included were two questions to directly assess stress.

Copies of the questionnaires were left at each clinic and couples were free to take them if they chose. Parents

were asked to fill out questionnaires independently and return them in prepaid envelopes. Names were not required thereby keeping the information obtained strictly anonymous and confidential.

Sample

The four health clinics in the study were distributed throughout the Edmonton area. Edmonton is a Western Canadian city of approximately 600,000 whose economy is based on oil and farming. Health care is publicly funded with no private hospitals or clinics. The primary purpose of the health clinics attended by the parents was the dispensing of immunizations. Therefore patients of the clinic could be from any socio-economic status or geographic region of the city.

Thirty copies of the questionnaire were left at each health clinic for a total of 120. Of the 120, 23 couples returned completed questionnaires. This represents a return rate of 19%.

The questionnaires were left on a chair in the waiting area of each clinic with a sign asking interested couples to complete them. There was no attempt by any staff of the clinic to make reference to the questionnaires to the parents. If they had more than one child, parents were asked to answer the questions about the child who caused them the most concern. Table 3.1 summarizes the demographic

data of the couples.

All of the couples were married with the majority of them earning more than $40,000 (52%) and between $20,000 and $30,000 (35%). Only 4% of the couples had earnings between $30-40,000. Therefore a unique feature of this sample is the lack of representation for this economic bracket.

The majority of the couples had 1 or 2 children (39% and 43% respectively). All of the fathers worked full time outside of the home, 65% of the mothers worked full time in the home and 35% worked outside the home either full or part time. The average age of the mothers was between 26 and 30 years while the average age of fathers was between 31 and 35 years. Ninety-five percent of the fathers described their wives as being very involved in child-rearing and 74% of the mothers said their husbands were quite involved in child-rearing but not as much as they, themselves, were. These couples could be described as "average" for this region.

Measures

Parenting Irrational Beliefs Scale (PIBS) - The Parenting Irrational Belief Scale was chosen because it allows for a natural extension of previous research with mothers (Ackerman, 1991) to include fathers.

The PIBS (included in Part 1 of the Questionnaire) consists of 22 statements about parenting. Endorsement of these statements is considered to be irrational. There are

Table 3.1

Demographic Data

Variable	Frequency	Percentage
Number of Children		
One	9	39.1
Two	10	43.5
Three	2	8.7
Four	2	8.7
Marital Status		
Married	23	100.0
Average Yearly Household Income		
15-20 thousand	2	8.7
20-30 thousand	8	34.8
30-40 thousand	1	4.3
More than 40 thousand	12	52.2
Employment Status		
Mothers		
Full time in home	15	65.2
Full time outside home	4	17.4
Part time outside home	4	17.4
Fathers		
Full time outside home	23	100.0
Parent Age		
Mothers		
16-20 years	1	4.3
21-25 years	3	13.0
26-30 years	11	47.8
31-35 years	6	26.1
36-45 years	2	8.7
Fathers		
26-30 years	5	21.7
31-35 years	12	52.2
36-45 years	6	26.1
Spousal Involvement in child rearing		
Mothers		
Very involved	4	17.4
Quite involved	17	73.9
Not very involved	2	8.7
Fathers		
Very involved	22	95.7
Quite involved	1	4.3

Table 3.1 continued

Attend a parent stress group		
Mothers		
Yes	15	65.2
No	8	34.8
Fathers		
Yes	8	34.8
No	15	65.2
*Age of Child		
Females		
0-6 months	5	21.7
7-12 months	2	8.7
13-24 months	9	39.1
25-36 months	7	30.4
Males		
0-6 months	5	21.7
7-12 months	3	13.0
13-24 months	7	30.4
25-36 months	8	34.8
*Sex of child		
Mothers		
Female	11	47.8
Male	12	52.2
Fathers		
Female	14	60.9
Male	9	39.1
*Birth order of child		
Mothers		
Only child	9	39.1
Eldest child	6	26.1
Middle child	3	13.0
Youngest child	5	21.7
Fathers		
Only child	9	39.1
Eldest child	7	30.1
Middle child	2	8.7
Youngest child	5	4.3

* Age, sex, and birth order refer to the one child about whom the parents answered the questionnaire.

two statements for each of Ellis' (1962) eleven irrational beliefs. For example, the irrational belief that it is essential for humans to be loved by all significant others in their lives has the following parenting irrational beliefs in the PIBS:

i) Parents must be loved by their children.

ii) I must always be a loving parent in order to gain the approval of my child.

Parents are asked to rate each statement on a five point Likert scale ranging from 1 (strong agreement) to 5 (strong disagreement). The scoring for items 5, 13 and 14 was reversed. This was done so that for all questions lower scores indicate a higher level of irrational belief.

The PIBS yields one total score and six subscale scores. The total score is a measure of the parents' level of irrational beliefs. Parents who score low would be considered to be more irrational in their thinking about parenting than those who score high. The six subscales are: Worry (parents worry about mistakes and what may happen to their child); Rigidity (rigid or dogmatic thinking about parenting); Secure Need for Perfection (secure need to handle most parenting problems); Insecure Need for Perfection (parents who are anxious about their parenting skills); Indecision (parent sense of competence) and Tendency to Catastrophize (tendency to exaggerate difficulties) (Ackerman, 1991). Norms do not exist for

fathers and to date two samples of mothers have completed the PIBS (Ackerman, 1991; Langford, 1988).

The PIBS has adequate face validity because the statements make sense in comparison to Ellis' and they appear to measure irrationality. Concurrent validity has been reported with the Rational Behaviour Inventory (.69) and with the Parenting Stress Index (.46) (Ackerman, 1991). Ackerman (1991) reports adequate discriminate validity. While research related to the clinical validity of the PIBS does not exist, clinical validity exists for Ellis' irrational beliefs (Smith, 1982) and Smith and Allred (1986) report that the existence of specific Irrational Beliefs scales increases their clinical validity. Thus, the PIBS can be hypothesized to have adequate clinical validity.

The PIBS has a coefficient of internal consistency of .87. Therefore it would appear to have adequate reliability.

Although the research into the reliability and validity of the PIBS is limited to two studies this present study and future research shall confirm or disconfirm these findings.

Parenting Stress Index (PSI) - The Parenting Stress Index was chosen because research has shown that it is a valid and reliable measure for identifying stress in the parenting system. Its intended use as a tool for early identification of stress makes it useful with parents of young children.

Its choice, as stated previously with the PIBS, allows for replication of previous research.

The Parenting Stress Index (Abidin, 1986) is a 101 item questionnaire. It is included in Part 2 of the questionnaire. It is divided into two domains, parent and child. Each domain includes a number of subscales. The child domain taps characteristics of the child that contributes to overall stress of the parent. The parent domain taps sources of stress related to dimensions of the parents' functioning.

The six subscales of the Child Domain are as follows: Child Adaptability/Plasticity; Acceptability of Child to Parent; Child Demandingness/Degree of Bother; Child Mood; Child Distractibility/Hyperactivity, and Child Reinforces Parent.

The seven subscales of the Parent Domain are: Parent Depression/Unhappiness/Guilt; Parent Attachment; Restrictions Imposed by Parental Role; Parent's Sense of Competence; Social Isolation; Relationship with Spouse; Parental Health.

The PSI yields a total score, Child and Parent Domain scores and Child and Parent subscale scores.

The PSI appears to have adequate face validity. Statements such as "My child gets upset easily over the smallest thing" and "I have had many more problems raising children than expected" would seem to be related to parent

stress (Questions 34 and 52 on the PSI).

Predictive validity studies have been reported in the PSI manual (Abidin, 1986). Several studies are of related interest. Lafiosca (cited in Abidin, 1986) used the PSI to adequately identify parents of children seen at a child development clinic. Upshur (cited in Abidin, 1986) identified 89% of the children in a high risk sample. A longitudinal study by McGaughey (cited in Abidin, 1986) adequately predicted children's adjustment problems at age five from PSI data collected when the child was eight months old.

Concurrent validity has been shown with the State-Trait Anxiety Scale (Spielberger, cited in Abidin, 1986), State-Trait Anxiety Index (Jenkins, cited in Abidin, 1986), Bayley Infant Development scales (Zakreski, cited in Abidin, 1986) and the Achenbach Child Behavior Checklist (Casey, cited in Abidin, 1986).

Construct validity has been shown with studies examining difficult children and maternal stress (Green, cited in Abidin, 1986), Spouse Support and Sense of Competence (McKinney & Peterson, cited in Abidin, 1986), Infant Attachment and Maternal and Paternal Stress (Hart, cited in Abidin, 1986) and Wanted and Unwanted Pregnancy and Total Stress (Young, cited in Abidin, 1986).

Alpha reliability coefficients are reported for the total, domain and subscale scores. The total stress score

yields an alpha reliability of .95, the child domain is .89 and the parent domain is .93. The alpha reliabilities range from .62 to .70 for the child domain and between .55 to .80 for the parent domain.

The PSI has been used in a number of studies in Canada and the United States. It has adequate reliability and validity. Therefore, use of the PSI in this current study is acceptable.

Reported Stress

In order to assess parents' stress more directly, two questions were added to the questionnaire at the end of Part 2 which contained the Parenting Stress Index. Each question required a response on a 5 point Likert scale. The two questions (numbers 102 and 103) read as follows: "I find being a parent very stressful" and "Since becoming a parent I have felt my life is more stressed".

Research Questions

In order to investigate the relationship between parent stress and parent irrational beliefs the following questions were posed:

1. What is the relationship between the parents' total score on the PSI and the parents' total score on the PIBS and PIBS subscales?
2. What is the relationship between the parents' scores on

the Child and Parent domains of the PSI and parents' total score on the PIBS and PIBS subscales?

3. What is the relationship between the parent and child subscales of the PSI and parents' total score on the PIBS?
4. What is the relationship between parents' reported stress and parents' total score on the PSI?
5. What is the relationship between parents' reported stress and parents' total score on the PIBS?
6. What is the relationship between the mothers' total score on the PSI and the mothers' total score on the PIBS and PIBS subscales?
7. What is the relationship between the mothers' scores on the Child and Parent domains of the PSI and mothers' total score on the PIBS and PIBS subscales?
8. What is the relationship between the parent and child subscales of the PSI and mothers' total score on the PIBS?
9. What is the relationship between mothers' reported stress and mothers' total score on the PSI?
10. What is the relationship between mothers' reported stress and mothers' total score on the PIBS?
11. What is the relationship between the fathers' total score on the PSI and the fathers' total score on the PIBS and PIBS subscales?
12. What is the relationship between the fathers' scores on

the Child and Parent domains of the PSI and fathers' total score on the PIBS?

13. What is the relationship between the parent and child subscales of the PSI and fathers' total score on the PIBS and PIBS subscales?
14. What is the relationship between fathers' reported stress and fathers' total score on the PSI?
15. What is the relationship between fathers' reported stress and fathers' total score on the PIBS?

In order to investigate the mother-father differences the following questions were posed:

16. Is there a difference between mothers' and fathers' total scores on the PSI?
17. Is there a difference between mothers' and father's scores on the child and parent domains?
18. Is there a difference between mothers' and fathers' total scores on the child and parent subscales?
19. Is there a difference between mothers' and fathers' total score on the PIBS?
20. Is there a difference between mothers' and fathers' scores on the PIBS irrational beliefs?
21. Is there a difference between reported stress for mothers and fathers?
22. Is there a difference between the correlations for mothers and fathers for the following scores: PSI Total, Child Domain, Child Domain Subscales, Parent

Domain, Parent Domain Subscales and Reported Stress with the PIBS?

In order to investigate the relationship between parents responses the following question was posed:

23. What is the relationship between mothers' scores and fathers' scores for the PSI (Total, Domain and Subscales) and the PIBS (Total Score and Subscale Scores).

Data Analysis

In order to determine the type of relationship that exists between the PSI and PIBS Pearson Product Moment correlations were calculated. For comparisons made between mothers' and fathers' scores and demographic variables, 2-tail T-tests were carried out. The level of significance used for all tests was .05.

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CHAPTER 4

RESULTS

Introduction

The results of the study are presented in this chapter. The summary statistics (mean, range, standard deviation and percentiles) for the Parenting Stress Index and the Parenting Irrational Beliefs Scale will be described initially. These will be compared with existing normative data. The results of the research questions presented in Chapter 3 will follow.

Summary of Descriptive Statistics for the Measures

Parenting Irrational Belief Scale (PIBS)

The Parenting Irrational Belief Scale (PIBS) is considered to be a measure of irrational thinking on behalf of parents regarding parenting. The scale yields one total score and six subscale scores for the 22 irrational beliefs that are stated. The range, mean and standard deviation for mothers and fathers for the PIBS Total Score is presented in Table 4.1. The highest possible score a person can receive is 110. (the lower the score the more irrational are the beliefs of the person.)

The mean score for mothers was 85.56 with the range being from 69.96 to 102.08. While there are no norms to compare this with previous research can be used; Ackerman

TABLE 4.1

Range, mean, standard deviation and percentiles for fathers and mothers on the Parenting Stress Index (PSI), Parenting Irrational Belief Scale (PIBS) and Reported Stress (R. Stress).

Score	Parent	Range	Mean	Standard Deviation	Percentile
PSI Total	Fathers	141-293	214.15	43.83	40
	Mothers	163-314	221.85	39.59	50
Child Domain Total	Fathers	70-142	101.36	18.75	60
	Mothers	74-142	98.52	17.86	50
Adaptability	Fathers	15-39	26.00	6.41	65
	Mothers	16-39	26.87	5.29	70
Acceptability	Fathers	7-18	12.96	3.51	60
	Mothers	7-19	12.87	3.08	60
Demandingness	Fathers	9-28	17.57	4.51	55
	Mothers	12-29	18.65	4.13	65
Mood	Fathers	5-17	9.81	3.04	60
	Mothers	5-16	8.83	2.73	50
Distractibility	Fathers	18-31	24.23	3.56	55
	Mothers	12-34	22.30	13.85	35
Reinforcement	Fathers	6-17	10.24	2.99	65
	Mothers	6-14	9.00	2.09	55
Parent Domain Total	Fathers	7-160	113.59	27.32	40
	Mothers	89-171	123.36	25.70	55
Depression	Fathers	9-31	16.23	5.80	20
	Mothers	9-29	19.09	7.03	45
Attachment	Fathers	7-21	14.13	3.83	75
	Mothers	7-19	12.57	2.70	65
Restriction	Fathers	7-27	16.62	4.98	40
	Mothers	7-27	19.35	5.44	55
Competence	Fathers	17-47	25.74	7.51	35
	Mothers	16-40	28.55	6.54	50

Table 4.1 continued

Score	Parent	Range	Mean	Standard Deviation	Percentile
Isolation	Fathers	6-22	12.42	4.32	50
	Mothers	7-25	13.74	5.20	70
Spouse	Fathers	7-29	16.35	5.63	50
	Mothers	9-31	17.22	5.17	55
Health	Fathers	7-28	11.96	2.96	65
	Mothers	7-22	12.87	3.36	75
PIBS Total	Fathers	59-105	85.60	0.50	
	Mothers	70-102	85.56	0.43	
Reported Stress	Fathers	2-10	6.43	1.05	
	Mothers	2-10	5.70	0.99	

(1991) reported that a mean score of 79.17 indicated that mothers had a tendency toward more rational thought. The same could be said about the current sample. The mean score for fathers was 85.60 with a range of 58.96 to 104.94. One could therefore say that as a group the fathers did not hold many irrational beliefs either.

Upon analysis of individual items mothers were more irrational for certain items than for others. Fifty-nine percent agreed with the statement "I constantly worry that some harm may come to my child". Fifty percent indicated that "Parents must be loved by their children" and forty-one percent felt that they "must always be loving parents in order to gain approval of their children".

The items that the fathers agreed to the most were similar to those of the mothers. Fifty-five percent felt "Parents must be loved by their children", fifty percent indicated that they "must always be loving parents in order to gain approval of their children" and twenty-eight percent agreed with the statement that "they constantly worry that some harm may come to my child".

Both mothers and fathers were therefore fairly similar with regards to the amount or irrational thinking and types of irrational beliefs that they hold.

Parenting Stress Index

The Parenting Stress Index (PSI) measures stress in the

parenting system. Mean scores, range, percentile and standard deviation for mothers and fathers are presented in Table 4.1 The total mean score on the PSI for mothers was 221.85. This would fall well within the normal range of 180-250 described by Abidin (1986). The range of scores for mothers was 163-314 indicating that some mothers were experiencing high stress (six mothers had scores greater than 250) and some, according to Abidin, were responding in a defensive manner or were investing little time in the parenting role (2 mothers had scores lower than 180).

This total score for mothers when compared to research with mothers using a similar sample would appear to indicate that the mothers in this sample may have been experiencing less stress. Ackerman (1991) reported a mean score for mothers on the PSI total of 238.

The total mean score for fathers was 214.15. This was similar to the mothers in being within the normal range of 180-250. A range of 141-293 contained 5 fathers with scores above 250 and 6 fathers with scores below 180. Therefore more fathers than mothers were reporting less stress than mothers as a result of being more defensive or less involved.

The child domain total scores for mothers was 98.52. This placed it at the fiftieth percentile. For the mothers in this sample the characteristics of the children is not a great source of stress. However 3 of the 23 mothers had

scores above 122 or the ninetieth percentile indicating the characteristics of their children were a great source of stress. This score for mothers on the child domain compares with a score of 105 (Ackerman, 1991) from previous research. This continues the trend from the PSI total score.

On the subscales of child domain all of the mothers' scores were in the normal range. The highest mean was for the adaptability subscale which was 26.87 (70th percentile). These patterns are consistent with previously discussed research.

Fathers scored at the 60th percentile with a mean of 101.36 for the child domain. Of the 23 fathers, 3 were above the 90th percentile. This pattern is similar to that of the mothers. On the child domain subscales as with others all were well within the normal range. The highest subscales were adaptability and reinforcement (both at the 65th percentile).

On the Parent Domain, which measures a parent's functioning, the mothers total score was 123.36 which was at the 55th percentile. Three of the mothers scored above the 90th percentile. In comparison to the research of Ackerman (1991) the mothers in the study received a Parent Domain score of 133 (70th percentile). The mothers in this present sample appear therefore to be less stressed.

Mothers' scores on the Parent Domain subscales were all in the normal range. The highest subscales were Isolation

(70th percentile) and Health (75th percentile). On the Health subscale four mothers were above the 90th percentile. Sense of Competence was the highest Parent Domain subscale for mothers in the previous study (Ackerman, 1991).

For fathers, the mean score on the Parent Domain was 113.59 (40th percentile). Two of the 23 fathers scored above the 90th percentile on the Parent Domain. On the subscales of the Parent Domain all of the scores were in the average range.

The highest score was for the attachment subscale (14.13, 75th percentile). On this subscale 10 fathers scored above the 90th percentile. This indicates that for this sample a number of the fathers did not feel an emotional bonding and/or did not understand the needs and feelings of their children. In comparison, only one of the mothers fell into this category.

Reported Stress

Reported stress is a direct measure of parental stress. The two questions yield a total maximum score of 10. Low scores indicate more stress than high scores. The mean score for mothers was 5.70 and 6.43 for fathers. Therefore, as measured by their reported stress, parents did not indicate that they were experiencing very much stress related to parenting.

Research Question 1

Research Question 1 asked what was the degree of the relationship between parents' total score on the PSI and parents' total score on the PIBS and PIBS subscales. In order to answer this question a Pearson Product Moment Correlation was performed. The results showed a correlation of .52 between parents' total score on the PSI and total score on the PIBS (p=.000, N=46) (see Table 4.2).

Examining the correlations between the PSI Total and the PIBS subscales four of the correlations were significant at .01 (Secure Need for Perfection (.53), Worry (.47), Insecure Need for Perfection (.43) and Indecision (.43)). The other two subscales were significantly correlated at .05 (Rigidity (.32) and Tendency to Catastrophize (.029)).

Research Question 2

Research Question 2 asked what was the general relationship between the parents' scores on the Parent and Child Domains of the PSI and the parents' total score on the PIBS and PIBS subscales. A Pearson Product Moment correlation was carried out to answer the question.

The results indicated that the Child Domain of the PSI correlated .39 with the PIBS (p=.004, N=46) (see Table 4.2). For the PIBS subscales three were significant with the PSI total at .01 (Secure Need for Protection (.44); Worry (.36) and Insecure Need for Perfection (.33)).

Table 4.2 Pearson Product Moment Correlations Between Total Scores and Subscales for Parents (Mothers and Fathers)

	PSI Total	PIBS Total	PIBS Worry	PIBS Rigidity	PIBS Sec. Need for Perf.	PIBS Insec. Need for Perf.	PIBS Indecision	PIBS Tendency to Catas.	PIBS Stress
PSI Total	1.00 **	.52 **	.48 **	.32 *	.53 **	.43 **	.43 **	.29 *	.63 **
Child	.89 **	.39 **	.36 **	.20	.44 **	.33 **	.24	.16	.50 **
Parent	.95 **	.53 **	.48 **	.33 **	.51 **	.43 **	.51 **	.32 **	.64 **
Adapt	.80 **	.37 **	.34 **	.14	.42 **	.26 *	.30 *	.14	.40 **
Accept	.66 **	.29 *	.24	.18	.35 **	.32 **	.21	.01	.23
Demand	.80 **	.40 **	.45 **	.25 *	.40 **	.30 *	.17	.34 **	.68 **
Mood	.61 **	.30 *	.27 *	.21	.28 *	.35 **	.06	.15	.36 **
Hyp	.51 **	.12	.11	.02	.20	.12	.01	.02	.30 *
Reinforce	.65 **	.41 **	.29 *	.35 **	.44 **	.33 **	.36 **	.08	.25 *
Depression	.85 **	.50 **	.47 **	.31 *	.47 **	.46 **	.46 **	.27 *	.44 **
Attach	.63 **	.36 **	.26 *	.29 *	.39 **	.30 *	.30 *	.20 *	.44 **
Restrict	.74 **	.38 **	.36 **	.28 *	.24 *	.27 *	.34 **	.25 *	.71 **
Compet	.81 **	.55 **	.51 **	.35 **	.59 **	.45 **	.45 **	.21	.66 **
Isolate	.75 **	.39 **	.33 **	.21	.39 **	.35 **	.45 **	.17	.44 **
Spouse	.59 **	.19	.16	.01	.14	.07	.25 *	.31 *	.25 *
Health	.41 **	.31 *	.37 **	.31	.33 **	.25 *	.31 *	.29 *	.25 *
PIBS Total	.52 **	1.00 **	.89 **	.89 **	.75 **	.83 **	.72 **	.74 **	.35 **

* $p \leq .05$ ** $p \leq .01$

The Parent Domain of the PSI correlated .53 with the PIBS (p=.000, N=46). All of the PIBS subscales were significantly correlated with the PSI total at .01. The highest of these were Secure Need for Perfection and Indecision (both r=.51), followed by Worry (r=.48).

Therefore, for parents taken as a group the Parent Domain correlated higher with the PIBS total (r=.53) than with the Child Domain (r=.39). Of the six PIBS subscales, the ones that seem to be most highly related to the PSI are Secure Need for Perfection, Worry and Indecision.

Research Question 3

Information about the relationship between the various subscales of the Parent and Child Domains of the PSI and total score on the PIBS for parents was sought in research question number 3. The results of the Pearson Product Moment correlations are shown in Table 4.2.

The correlations for the six subscales of the Child Domain ranged from a low of .12 for the Distractibility subscale (p=.22, N=45) to a high of .41 for the Reinforces Parent subscale (p=.003, N=46). Those subscales that are significant at the .01 level are: Reinforces Parent (.41), Demandingness (.40), and Adaptability (.37). Those subscales significant at the .05 level are: Mood (.29) and Acceptability (.29). Therefore, five of the six subscales of the Child Domain were significantly correlated with the

PIBS Total score.

The correlations for the seven subscales of the Parent Domain ranged from a low of .19 for the Relationship with Spouse subscale (p=.099, n=46) to a high of .55 for the Competence subscale (p=.000, n=46). Besides the Competence subscale, significant correlations were found with all of the subscales except for Relationship with Spouse.

The next highest correlation after Competence was Depression (r=.50). Of the total domain and subscale correlations with the PIBS, the Sense of Competence subscale correlated the highest. Thus, six of the seven subscales of the Parent Domain were significantly correlated with the PIBS. Therefore, subscales from both domains were related to parents' irrational beliefs.

Research Question 4

The degree of the relationship between parents reported stress and parents total score on the PSI was questioned in research question 4. The resulting Pearson Product Moment correlation was .63 (p=.001, N=46) (see Table 4.2).

This significant result indicates that there is a high degree of relationship between parents reported stress and their level of stress as measured by the PSI.

Research Question 5

Research question 5 examined the type of relationship

that exists between parents' reported stress and their total score on the PIBS. A Pearson Product Moment correlation was carried out and resulted in a correlation of .35 (p=.008, N=46) (see Table 4.2).

This finding would be considered significant indicating that there is a positive relationship between parents' reported stress and their total score on the PIBS.

Research Question 6

Research question 6 asked what the degree of the relationship between mothers' total score on the PSI and mothers' total score on the PIBS and PIBS subscales. In order to answer this question a Pearson Product Moment correlation was performed. The result showed a relationship of .40 between mothers' total score on the PSI and total score on the PIBS (p=.031, N=23) (see Table 4.3).

The above correlation of .40 can be considered significant at the .05 level. This would be consistent with some of the findings discussed in the literature, most specifically those using the PIBS and PSI. Ackerman (1991) obtained a correlation of .47 between the PIBS and PSI. The Ackerman (1991) study and present study both sampled mothers from similar health clinics. Therefore, for the mothers sampled from this geographic area there would be a positive relationship between parent stress and parent irrational beliefs.

Table 4.3 Pearson Product Moment Correlations Between Total Scores and Subscales for Mothers

	PSI Total	PIBS Total	PIBS Worry	PIBS Rigidity	PIBS Sec. Need for Perf.	PIBS Insec. Need for Perf.	PIBS Indecision	Tendency to Catas.	PIBS Stress
PSI Total	1.00 **	.40 *	.40 *	.13	.54 **	.46 **	.38 *	.19	.55 **
Child	.87 **	.20	.33	.07	.42 *	.20	.13	.05	.44 *
Parent	.94 **	.47 **	.39 *	.25	.55 **	.57 **	.50	.25	.54 **
Adapt	.75 **	.27	.33	.02	.59 **	.31	.29	.01	.26
Accept	.68 **	.10	.24	.00	.26	.14	.09	.15	.19
Demand	.75 **	.38 *	.51 **	.20	.44 *	.28	.20	.34	.49 **
Mood	.51 **	.07	.17	.04	.11	.05	.07	.04	.40 *
Hyp	.62 **	.09	.02	.38 *	.13	.03	.09	.04	.35 *
Reinforce	.76 **	.28	.38 *	.20	.35 *	.22	.18	.06	.38*
Depression	.81 **	.37 *	.35 *	.13	.50 **	.50 **	.39 *	.12	.31
Attach	.42 *	.01	.11	.04	.04	.10	.20	.10	.22
Restrict	.70 **	.37 *	.21	.35 *	.19	.38 *	.35 *	.23	.70 **
Compet	.74 **	.52 **	.61 **	.30	.66 **	.56 **	.38 *	.14	.55 **
Isolate	.70 **	.29	.14	.06	.45 *	.41 *	.42 *	.06	.37 *
Spouse	.61 **	.18	.03	.10	.19	.30	.25	.32	.18
Health	.55 **	.51 **	.46 **	.52 **	.53 **	.41 *	.53 **	.37 *	.26
PIBS Total	.40 *	1.00 **	.86 **	.86 **	.73 **	.91 **	.81 **	.65 **	.21

* $p \leq .05$ ** $p \leq .01$

The subscales of PIBS that correlate most highly with the PSI total are Secure Need for Perfection (.54) and Insecure Need for Perfection (.46) which are both significant at the .01 level. The PIBS subscales Worry and Indecision both significantly correlate with the PSI Total.

Research Question 7

Research question 7 asked what was the general relationship between the mothers' scores on the Parent and Child Domains of the PSI and mothers' total score on the PIBS. A Pearson Product Moment correlation was carried out to answer this question.

The results indicated that the Child Domain on the PSI correlated .20 with the PIBS ($p=.178$, $N=23$) and the Parent Domain of the PSI correlated .47 with the PIBS ($p=.012$, $N=23$) (see Table 4.3).

These results exhibit the same pattern as with previous research with the Parent Domain correlated higher with the PIBS than the Child Domain, but the difference is greater with the current research. Ackerman (1991) found a correlation of .40 between the Child Domain and the PIBS and .51 between the Parent Domain and the PIBS. Therefore, the results from the research would appear to be more similar to the previous research for the Parent Domain correlation which is significant at the .05 level. However, it would not be for the Child Domain correlation which is not

significant at the .05 level.

The results for the correlations between the PIBS subscales and the Parent and Child Domains exhibit the same pattern as the correlations between the Parent and Child Domains and the PIBS total. For the Child Domain only the Secure Need for Perfection subscale was significant at the .05 level. For the Parent Domain the Secure and Insecure Need for Perfection subscales and the Indecision subscales were all significant at the .01 level (.55, .56, and .50 respectively) and the Worry subscale was significant at the .05 level (.39).

In similar fashion to the parent group as a whole, mothers' scores on the Parent Domain correlate more highly with the PIBS than for the Child Domain. Those subscales of the PIBS that are most highly related to the PSI are: Secure and Insecure Need for perfection, Indecision and Worry.

Research Question 8

Information about the relationship between the various subscales of the Parent and Child Domains of the PSI and total score on the PIBS was sought for mothers in research question 8. The results of the Pearson Product Moment correlations are shown in Table 4.3.

The correlations for the six subscales of the Child Domain ranged from a low of .07 for the Acceptability subscale (p=.377, N=23) to a high of .38 for the

Demandingness subscale (p=.036, N=23). The Demandingness subscale was the only correlation of the six subscales that was significant. The Demandingness subscale was also one of the highest correlations of the Child Domain subscales for the combined parent group.

The correlations of the seven subscales of the Parent Domain ranged from a low of .01 for the Attachment Subscale (p=.476, N=23) to a high of .52 for the Sense of Competence subscale (p=.006, N=23). Besides the Sense of Competence subscale, the Parent Health subscale was significantly correlated with the PIBS (r=.51, p=.007, N=23). Also significantly correlated with the PIBS were the Depression and Restriction of Role subscales.

There are some similar patterns with these correlations and that of previous research (Ackerman, 1991). For the Child Domain both studies found Child Demandingness to be highly related to parent irrational beliefs. For the Parent Domain in the Ackerman study Sense of Competence is ranked first and Depression second. In the current study Sense of Competence ranked first while Depression tied third with Restriction of Role. Therefore these subscales may be considered as having a higher likelihood of being related to irrational beliefs. The high correlation between the Health Subscale and the PIBS does not occur in the previously discussed research.

Research Question 9

Research question 9 examined the relationship that exists between mothers' reported stress and their total score on the PSI.

A Pearson Product Moment correlation was carried out and resulted in a correlation of .55 (p=.003, N=23) (see Table 4.3) which would be considered significant. This correlation is similar to previous research (Ackerman, 1991) which obtained a correlation of .66 as well as the current parent group.

Research Question 10

The degree of the relationship between mothers' reported stress and mothers' total score on the PIBS was questioned in research question 10. The resulting Pearson Product Moment correlation was .21 (p=.171, N=23) (see Table 4.3).

This finding would not be considered significant as was the case with the parent group. The previous research also yielded a low correlation (r=.31) (Ackerman, 1991).

Research Question 11

Research question 11 questioned the degree of the relationship between fathers' total score on the PSI and fathers' total score on the PIBS and PIBS subscales. In order to answer this question a Pearson Product Moment

correlation was performed.

The result showed a relationship of .68 between fathers' total score on the PSI and total score on the PIBS (p=.000, N=23) (see Table 4.4).

This result would indicate that there is a significant relationship between fathers' stress and their level of irrational beliefs. This is consistent with the review of the literature and Albert Ellis' (1962) belief that irrational thinking can lead to anxiety. Therefore, the relationship that exists between irrational beliefs and stress for mothers also holds for fathers.

All of the PIBS subscales were significantly correlated with the PSI total score. The highest was Secure Need for Perfection (r=.56, p=.003), followed by Worry (r=.52, p=.006) and the lowest was Tendency to Catastrophize (r=.36, p=.048).

Research Question 12

Research Question 12 asked what was the general relationship between the fathers' scores on the Parent and Child Domains of the PSI and the fathers' total score on the PIBS and PIBS subscales. A Pearson Product Moment correlation was carried out to answer this question.

The results indicated that the Child Domain of the PSI correlated .56 with the PIBS (p=.004, N=22) and the Parent Domain of the PSI correlated .60 with the PIBS (p=.001,

Table 4.4 Pearson Product Moment Correlations Between Total Scores and Subscales for Fathers

	PSI Total	PIBS Total	PIBS Worry	PIBS Rigidity	PIBS Sec. Need for Perf.	PIBS Insec. Need for Perf.	PIBS Indecision	PIBS Tendency to Catas.	PIBS Stress
PSI Total	1.00 **	.63 **	.52 **	.48 **	.56 **	.46 **	.51 **	.36 **	.70 **
Child	.93 **	.56 **	.41 *	.41 *	.45 *	.51 **	.43 *	.31	.59 **
Parent	.97 **	.60 **	.53 **	.46 **	.56 **	.36 *	.52 **	.34	.70 **
Adapt	.84 **	.44 *	.32	.27	.34	.26	.33	.27	.50 **
Accept	.65 **	.43 *	.24	.35 *	.42 *	.54 **	.38 *	.17	.28
Demand	.83 **	.43 *	.37 *	.33	.42 *	.38 *	.13	.32	.83 **
Mood	.75 **	.47 **	.42 *	.34	.36 *	.67 **	.29	.34	.42 *
Hyp	.47 **	.42 *	.34	.44 *	.23	.34	.33	.23	.34
Reinforce	.66 **	.50 **	.30	.39 *	.46 *	.40 *	.68 **	.17	.24
Depress	.93 **	.69 **	.58 **	.58 **	.57 **	.51 **	.56 **	.43 *	.54 **
Attach	.84 **	.59 **	.45 *	.38 *	.56 **	.44 *	.53 **	.38 *	.72 **
Restrict	.79 **	.42 *	.44 *	.32	.41 *	.24	.31	.21	.70 **
Compet	.87 **	.59 **	.37 *	.45 *	.63 **	.43 *	.56 **	.20	.74 **
Isolate	.80 **	.52 **	.51 **	.41 *	.41 *	.33	.50 **	.27	.49 **
Spouse	.57 **	.20	.30	.11	.14	.15	.24	.28	.28
Health	26	.13	.24	.19	.21	.08	.06	.14	.21
PIBS Total	.63 **	1.00 **	.92 **	.93 **	.78 **	.78 **	.68 **	.85 **	.48 **

* $p \leq .05$ ** $p \leq .01$

N=23) (see Table 4.4). Both parent and child characteristics were significantly related to fathers' irrational beliefs. This would be similar to the combined parent group and different from the mother group in which only the Parent domain was significantly related to the PIBS.

Comparing these results to past research using mothers, the Child and Parent Domain correlations are both higher for the current father sample. Ackerman (1991) found a correlation of .40 between the Child Domain and the PIBS and a correlation of .51 between the Parent Domain and PIBS. From the research done to date, the relationship between the Parent Domain of the PSI and the PIBS is stronger than the relationship between the Child Domain of the PSI and PIBS for both fathers and mothers.

All of the subscales of the PIBS correlated significantly with the Child Domain except for Tendency to Catastrophize. The correlations of the other subscales ranged from a high of .51 (Insecure Need for Perfection) to a low of .41 (Worry). For the Parent Domain all subscales except Tendency to Catastrophize correlated significantly with the PIBS. The correlations for these subscales range from .36 (Insecure Need for Perfection) to .56 (Secure Need for Perfection).

Determining which subscales of the PIBS have the strongest relationship to the PSI for the fathers was not as

evident as for the sample of mothers. However, the subscales Secure Need for Perfection and Worry are the most significant.

Research Question 13

Information about the relationship between the various subscales of the Parent Domain and Child Domain of the PSI and total score on the PIBS was sought for fathers in research question 13. The results of the Person Product Moment correlations are shown in Table 4.4.

The correlations for the six subscales of the Child Domain ranged from a low of .42 for the Distractibility/Hyperactivity subscale (p=.027, N=23) to a high of .50 for the Reinforces Parent subscale (p=.012, N=23).

All of the subscales were significant at either the .01 or .05 level. The highest subscale after the Reinforces Parent subscale was the Mood subscale (r=.47).

The correlation for the seven subscales of the Parent Domain ranged from a low of .13 for the Parent Health subscale (p=.283, N=23) to a high of .69 for the Depression subscale (p=.000, N=22). After the Depression subscale the next highest subscales were Sense of Competence and Attachment (r=.59 for both). In previous research, the Depression and Sense of Competence subscales were the most significant subscales for mothers (Ackerman, 1991). The

Sense of Competence subscale was the most significant correlation with the PIBS for the current mother sample. The pattern seems to be similar for fathers.

Research Question 14

Research question 14 examined the type of relationship that exists between fathers' reported stress and their total score on the PSI. A Pearson Product Moment correlation was carried out and resulted in a correlation of .70 (p=.000, n=23).

This correlation is significant and slightly higher than the mother group from this sample which was .55. It is very similar to the previous sample of mothers that was studied by Ackerman (1991).

Research Question 15

The degree of the relationship between fathers reported stress and fathers' total score on the PIBS was questioned in question 15.

The resulting Pearson Product Moment correlation was .48 (p=.010, N=23). This correlation would be considered significant. This result is higher than the previous research with mothers (Ackerman, 1991) and the current mother group.

Research Question 16

Research question 16 asked if there was a difference between mothers' and fathers' total scores on the PSI. An independent 2-tailed T-test was performed to answer this question.

The mean total score for mothers on the PSI was 221.85 and the mean total score for fathers was 214.15. The statistical significance (p) for the difference between these two scores is .535 (see Table 4.5). There would not appear to be a statistically significant difference between mothers and fathers level of stress as measured by the PSI.

In Chapter Two it was predicted that fathers would score less than mothers on the PSI. For this sample this did not occur. Mothers and fathers were experiencing the same levels of stress.

Research Question 17

The Parent and Child Domain scores of the PSI were compared for mothers and fathers for research question 17. Independent 2-Tailed T-tests were carried out.

The mothers' mean on the Child Domain of the PSI was 98.52 and the fathers' mean was 101.36 . The statistical significance (p) that there is a difference between these two scores is .605. The mothers' mean on the Parent Domain is 25.70 and the fathers' mean on the Parent domain is 27.32. The statistical significance (p) that there is a difference between these two scores is .218 (see Table 4.5).

Table 4.5

Statistical significance (p) of the difference between means for mothers and fathers on the Parenting Stress Index (PSI).

Scale	Mothers' Mean	Standard Deviation	Fathers' Mean	Standard Deviation	p
PSI Total	221.85	39.59	214.15	43.83	.54
Child Domain	98.52	17.86	101.36	18.75	.61
Adaptability	26.87	5.29	26.00	6.41	.62
Acceptability	12.87	3.08	12.96	3.51	.93
Demandingness	18.65	4.13	17.57	4.51	.40
Mood	8.83	2.73	9.81	3.04	.25
Distractibility	22.30	13.85	24.23	3.56	.17
Reinforcement	9.00	2.09	10.24	2.99	.11
Parent Domain	123.36	25.70	113.59	27.32	.22
Depression	19.09	7.03	16.23	5.80	.12
Attachment	12.57	2.70	14.13	3.83	.12
Restriction	19.35	5.44	16.62	4.98	.08
Competence	28.55	6.54	25.74	7.51	.18
Isolation	13.74	5.20	12.42	4.32	.35
Spouse	17.22	5.17	16.35	5.63	.59
Health	12.87	3.36	11.96	2.96	.33

Note: Statistical significance for mean difference was obtained from an independent sample 2-tailed T-test.

As was the case with the total scores for these measures, the Domain scores were not significantly different.

Research Question 18

Research question 18 asked if there was a difference between mothers' and fathers' scores on the Child and Parent Domain subscales of the PSI.

On the Child Domain subscale the statistical significance (p) that there was a difference between the means ranged from .114 for the Reinforcement subscale (mothers=9.00, fathers=10.24) to .929 for the Acceptability subscale (mothers=12.87, fathers=12.96). On the Parent Domain subscale the statistical significance (p) for the difference between the means ranged from .083 for the Restriction subscale (mothers=19.35, fathers =16.62) to .588 for the Spouse subscale (mothers=17.22, fathers=16.35) (see Table 4.5). Thus none of the subscales yielded statistically different scores for mothers and fathers.

Research Question 19

Research question 19 asked if there was a difference between mothers and fathers' total scores on the PIBS. The results from an independent 2-tailed T-Test are shown in Table 4.6.

The mothers' mean for the total score was 85.56 and the fathers' mean was 85.60. The statistical significance (p)

that there is a difference between these two scores is .990. This result indicates that there is not a significant difference between mothers' and fathers' total score on the PIBS. This is consistent with the review of the literature in Chapter Two.

Research Question 20

Research question 20 asked if there was a difference in the mothers' and fathers' for the 22 parenting irrational beliefs.

The statistical significance (p) for an independent T-Test ranged from a low of .034 ("I can learn from my experiences as a child and use them to become a better parent") to a high of .900 ("Parents must be loved by their children.") (see Table 4.6). As was the case with the difference between the total score for mothers and fathers on the PIBS, none of the individual parenting irrational beliefs were answered differently by mothers and fathers.

Research Question 21

A Two-tailed independent T-Test was used to answer research question 21 which asked if there was a difference between reported stress for mothers and fathers.

The mothers' mean for reported stress was 5.70 and the fathers' mean was 6.43. The results shown in Table 4.6 indicate that the statistical significance (p) for the

Table 4.6

Statistical significance (p) of the difference between means for mothers and fathers on the Parenting Irrational Belief Scale (PIBS) and Reported Stress (R. Stress).

Scale	Mothers' Mean	Standard Deviation	Fathers' Mean	Standard Deviation	p
PIBS Total	85.56	9.37	85.60	10.98	.99
PIBS 1	3.00	1.13	2.91	1.20	.80
PIBS 2	4.14	.89	3.87	.69	.20
PIBS 3	3.43	1.24	3.70	1.30	.49
PIBS 4	2.57	1.31	3.36	1.14	.04
PIBS 5	3.87	1.36	4.26	.62	.22
PIBS 6	4.22	1.04	4.00	1.00	.47
PIBS 7	3.39	1.16	3.52	1.00	.68
PIBS 8	4.61	.78	4.04	1.02	.04
PIBS 9	2.74	1.18	2.70	1.15	.90
PIBS 10	4.65	.65	4.70	.47	.80
PIBS 11	4.09	1.00	3.96	.98	.66
PIBS 12	3.56	1.27	4.13	1.01	.10
PIBS 13	4.30	.70	4.04	.93	.29
PIBS 14	4.48	.59	3.91	1.08	.03
PIBS 15	3.57	1.20	3.87	1.06	.37
PIBS 16	4.30	.93	4.35	.78	.86
PIBS 17	4.61	.66	4.35	.94	.28
PIBS 18	4.00	.91	3.78	1.17	.48
PIBS 19	4.04	.93	3.96	.98	.76

Table 4.6 continued

Scale	Mothers' Mean	Standard Deviation	Fathers' Mean	Standard Deviation	p
PIBS 20	3.57	1.20	4.00	.74	.15
PIBS 21	4.04	1.15	4.00	.67	.88
PIBS 22	4.35	.94	4.22	.80	.61
R. Stress	5.70	.99	6.43	1.05	.28

Note: Statistical significance for mean difference was obtained from an independent sample 2-tailed T-test.

difference is .277. Thus there is not a statistically significant difference between parents' Reported Stress.

Research Question 22

Research Question 22 compared the correlations for mothers and fathers between the PSI total, PSI Child Domain, Child Domain Subscales, PSI Parent Domain, Parent Domain Subscales, PIBS and Reported Stress. A Two-tailed test of the significance of the difference between two correlation coefficients for independent samples was done. The results are in Table 4.7. The results indicate that none of the differences between the correlations examined were significant.

Examination of the results indicates that there was a significant difference between mothers' and fathers' correlation coefficients for one correlation. That subscale was the attachment subscale. Therefore, for fathers, the degree of attachment is related to irrational beliefs whereas for mothers it is not.

For the remainder of the subscales and total scores, the correlations cannot be said to be statistically different.

Research Question 23

Research question 23 examined the relationship between mothers' and fathers' scores on the PSI (Total, Domain and

Table 4.7

Statistical significance (p) of the difference between the correlations for the mother and father samples.

Correlation	Mothers' r	Fathers' r	p
PSI Total r PIBS Total	.37	.63	.28
PSI Child r PIBS Total	.20	.56	.18
PSI Parent r PIBS Total	.47	.60	.56
PSI Adapt r PIBS Total	.27	.44	.54
PSI Accept r PIBS Total	.10	.43	.25
PSI Demand r PIBS Total	.38	.43	.85
PSI Mood r PIBS Total	.07	.47	.16
PSI Hyp r PIBS Total	.09	.42	.26
PSI Reinforce r PIBS Total	.28	.50	.41
PSI Depression r PIBS Total	.37	.69	.15
PSI Attach r PIBS Total	.01	.59	.03
PSI Restrict r PIBS Total	.37	.42	.85
PSI Compet r PIBS Total	.52	.59	.75
PSI Isolation r PIBS Total	.29	.52	.38
PSI Spouse r PIBS Total	.18	.20	.94
PSI Health r PIBS Total	.51	.13	.17
PSI Total r R. Stress	.55	.70	.79
PIBS Total r R. Stress	.21	.48	.32

Subscales) and the PIBS (Total and Subscales). A Pearson Product Moment Correlation was carried out to answer this question. The results are in Table 4.8.

An examination of Table 4.8 reveals the only significant correlation was the PSI Subscale Restriction of Role. This means that for this subscale couples were answering the question in a similar manner. For all of the other subscales couples were answering the question independently. Therefore, although the mean scores for parents were not different, the way individual couples answered the questionnaire differed.

Table 4.8

Pearson Product Moment Correlations
Between Parents' Scores on PSI and PIBS.

Scale	Correlation between Parents' Scores	p
PSI Total	.09	.27
Child Domain	-.08	.30
Parent Domain	.19	.11
Adapt	.08	.31
Accept	-.01	.47
Demand	.13	.20
Mood	-.17	.12
Hyp	-.21	.08
Reinforce	-.24	.06
Depression	.22	.07
Attach	-.23	.06
Restrict	.26	.04
Compet	.20	.09
Isolation	.14	.18
Spouse	.08	.29
Health	.15	.17
PIBS	.00	.50
Worry	-.18	.12
Rigid	.15	.17
Secure	.17	.13
Insecure	.15	.17
Indecision	-.11	.24
Tenden	-.17	.14

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CHAPTER 5

DISCUSSION

Introduction

In this chapter the results of this thesis are summarized and their implications discussed. This discussion shall centre around the purpose for undertaking this study as highlighted in Chapter 1, namely the relationship between levels of stress and irrational beliefs for parents as a group, for mothers and for fathers. The differences between mothers' and fathers' levels of stress and irrational beliefs will also be discussed. Possibilities for further research will be presented.

Parent Stress and Irrational Beliefs

Parents' irrational beliefs as measured by the PIBS are significantly correlated with parental stress as measured by the PSI. This relationship is greater for those areas of stress that are related to the parents' functioning than for stress relating to characteristics of their children. This may indicate that parents' irrational beliefs are not as influenced by children as by how parents are functioning.

Those areas of parent functioning that are most closely related to their irrational beliefs are: sense of competence, depression and social isolation. These three areas are all closely related. Examination of the

intercorrelations between these subscales showed that these were the most highly intercorrelated of all subscales. The two subscales most related to the Depression subscale are Sense of Competence (r=.75, p=.000, N=45) and Social Isolation (r=.73, p=.000, N=45). There is a tendency for depressed people to feel they are not competent or capable; as well they are often socially removed from others. These areas could therefore be the seeds of irrational thought. For example, when a parent is lacking in information and cannot discuss things with other people he or she may feel that other parents love their children all the time and therefore it is not right if he or she does not.

The subscales from the Child Domain that are significantly related to parenting irrational beliefs are Reinforces Parent and Child Demandingness. The less reinforcement a parent receives from a child and the more demanding a child is (crying, frequent requests for help) the more irrational parents tend to be. These factors may greatly influence a parent's sense of competence which is significantly related to irrational beliefs. The highest correlation between subscales across domains was between Demandingness and Sense of Competence (r=.69, p=.000,N=46).

The types of irrational beliefs most associated with parent stress can be seen by examining table 4.2. The PIBS subscales Secure Need for Perfection and Worry correlated highest with the PSI total. The PSI subscales that they

correlated most highly with are, not surprisingly, the Sense of Competence and Depression subscale.

The parental irrational beliefs surrounding worry ("I constantly worry that I will make a terrible mistake as a parent") and need for perfection ("If I am not a perfect parent than I am a failure") have the most influence over a parent's level of stress. They do this by impinging on their Sense of Competence which could lead to depression.

The relationship between parents' Reported Stress and the PSI and PIBS did show differences. The correlation between Reported Stress and the PSI was greater than the correlation between Reported Stress and the PIBS. This could be because the PSI is a measure of stress. What parents have in mind when they think of stress may not be those things tapped by the PIBS.

Mother Stress and Irrational Beliefs

The research resulted in a significant correlation between Mother's stress and Irrational beliefs. However, the correlation was lower than that of the father group. Unlike the father group and past research with mothers (Ackerman, 1991), the Child Domain did not correlate significantly with the PIBS. With the Parent Domain there was a significant correlation with the PIBS that was similar to Ackerman's Study. This would confirm the importance of parent functioning in relation to irrational thinking.

The areas of maternal functioning that have the greatest influence over irrational thought are: Sense of Competence, Health, Depression and Restriction of Role. The high correlation between the health subscale and the PIBS Total score differed from both the previous research with mothers and the current father group. The mothers in this sample scored at the 75th percentile on this subscale and four of the 23 were over the 90th percentile.

The only subscale of the Child Domain that significantly correlated with the PIBS Total score was the Demandingness subscale. This subscale was also significant with the fathers and past research with mothers (Ackerman, 1991).

Those areas of irrational beliefs that are most related to parent stress are: Secure Need for Perfection, Insecure Need for Perfection (those beliefs that center around anxiety over parenting skills) and Worry.

As with the parent group there was a significant relationship for mothers between Reported Stress and stress as measured by the PSI but not between Reported Stress and the PIBS Total.

Father Stress and Irrational Beliefs

The fathers' irrational beliefs (PIBS) are significantly related to their level of stress (PSI). In this study this relationship is stronger for fathers than

for mothers. As in previous research, the areas of stress that are most related to irrational thinking are parent characteristics (eg. Depression, Sense of Competence, Social Isolation). The Depression subscale for fathers received the highest correlation with the PIBS followed by the Sense of Competence subscale. Examination of the intercorrelations between subscales shows that Depression is most highly related to Social Isolation and Sense of Competence.

Child characteristics seem to be related more to the irrational beliefs of fathers than to the irrational beliefs of mothers. Besides Child Demandingess (which has been related both in past research with mothers and in the current mother sample), areas such as Reinforces Parent and Mood also appear to be related. Reinforces Parent was the Child Domain subscale to correlate highest with the PIBS. It also correlated highly with the Depression subscale.

The areas of irrational thought that are most related to stress are Secure Need for Perfection, Worry and Indecision. Fathers may feel stress in the form of depression, a lack of sense of competence and isolation that may result from a perfectionistic thinking about parenting and worry about their children.

As has been found with mothers (both past and present) fathers' reported stress was more closely related with a measure of stress (PSI) than with a measure of irrational

thought (PIBS). One difference noted was that for fathers the relationship between Reported Stress and Irrational thought (PIBS) was significant.

Mother-Father Differences

The mothers and fathers in this study did not show any differences with regards to their level of stress or irrational beliefs when mean scores were compared. However, an examination of the correlation between scores for mothers and fathers revealed no relationship. Therefore, whereas mothers and fathers as a group may have similar scores the case could be different for individual couples.

A comparison of the difference between the correlations coefficients for mothers and fathers between stress and irrational beliefs also did not yield many differences. However, it can be noted that due to the sample size a large difference between correlation coefficients was required for significance. Therefore, while not statistically significant, it would appear that there may be some differences between mothers' and fathers' correlations. Research with a larger sample may help to determine if this is the case.

Conclusion

The purpose of this study was to examine the relationship between parent stress and irrational beliefs

and mother/father differences with regards to this.

It can be concluded from this thesis that parents (both mothers and fathers) irrational beliefs are related to parent stress. In both cases parent factors are more highly related to irrational beliefs than child factors.

Parents who expect that no harm should come to their child (and worry excessively about it) and that they have to be perfect parents (or they are failures) may experience depression and/or a lack of sense of competence. This end result may be amplified if parents also have children who are demanding and do not provide any positive feedback.

It is also relevant to note that the levels of stress and irrational thought were the same for mothers and fathers when compared as a group. This might not be the case with individual couples. When one compares the results from this sample of fathers with the mothers from both previous research and the current sample, it is clear that the relationship that exists between irrational thought and stress for mothers also exists to the same degree for fathers. This would be one of the most important findings from this research.

Parent stress, its causes and its impact on mothers is an often talked about topic. Its existence in fathers is not as well acknowledged or discussed.

From a clinical perspective it can be seen that irrational parent thought and stress are related. Probing

the parenting irrational beliefs and disproving them in a clinical setting may provide parents with some information which would change their sense of competence and provide some badly needed social support.

The use of rational emotive therapy with parents as individuals could be recommended because they may hold different irrational beliefs.

While rational emotive therapy may be useful with parents as individuals, it should be noted that this sample's level of irrational beliefs was not clinically high and parents may not require individual rational emotive therapy. Rational emotive therapy could therefore be useful for couples when integrated with other forms of therapy as required.

Implications for Future Research

Areas of future research may continue to explore the relationship between stress and the Parenting Irrational Belief Scale. Correlations with different measures of stress as well as separate measures of some of the subscales would be needed.

The relationship between parent stress and parent irrational beliefs could be examined for different family situations. Examples include: single parent families and homes with both parents working full time.

Research with parents of older children could also be

undertaken. This would include a measure completed by the children to determine the relationship between parents' stress and irrational beliefs and the functioning of their children.

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APPENDIX A

Parent Stress and Irrational Beliefs Questionnaire

University of Alberta
Edmonton
Canada T6G 2G5

Department of Educational Psychology
Faculty of Education
6-102 Education North, Telephone (403) 432-5245

Parent Stress and Beliefs Study

Dear Parent,

Dr. Calder of the University of Alberta is conducting a study dealing with the stress experienced by parents of young children. The study involves having mothers and fathers with children under the age of three each fill out a questionnaire about their levels of stress and some of their beliefs related to child rearing practices. Participation in the study is strictly **voluntary**. We would appreciate your cooperation in filling in the accompanying questionnaires. One questionnaire is for the mother and one is for the father and we would appreciate it if you filled them out separately without consulting each other. They should take you approximately 30 minutes to complete and can be completed at home and returned to Dr. Calder by mail. All postage is prepaid. Simply put the questionnaires in the accompanying envelope and drop it in the mail.

Please answer all questions and give your first response. This is a survery of attitudes and there are no right or wrong answers. There is no need to put your name anywhere on the questionnaire and all responses will be kept confidential. The data from the study will form the basis of my Ph.D. research and will contribute to the completion of my Doctorate in Educational Psychology.

We thank you for your help in assisting us with this project. If you have any questions concerning the study or the questionnaire, or feel that you need help with the stress that you are experiencing, please feel free to contact myself evenings, at 467-4481 or Dr. Calder daytime, at 432-3696.

Yours truly,

Kathleen A. Ackerman, M.Ed.
Department of Educational Psychology
University of Alberta

Dr. Peter Calder
Supervising Professor
Department of Educational Psychology
University of Alberta

ID
ID
ID
R. NO.

QUESTIONNAIRE

PART 1

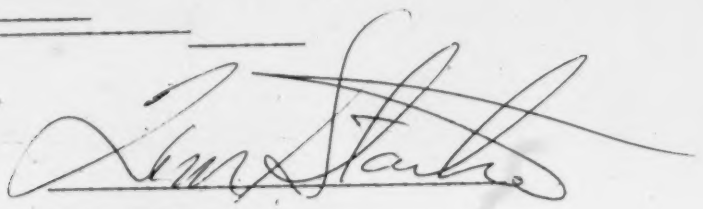
Please mark the degree to which you agree or disagree with the following statements by circling the number which clearly reflects your opinion. Do not use the spaces at the far right side of the page. Please work quickly and answer each question.

1 indicates a **strong agreement** with the statement
2 indicates that you **agree** with the statement but not strongly
3 indicates that you are **neutral**; that is, you neither agree nor disagree.
4 indicates a **disagreement** with the statement, but not a strong disagreement
5 indicates a **strong disagreement** with the statement.

1.	I must always be a loving parent in order to gain the approval of my child.	1 2 3 4 5
2.	It is terrible when my child is not the way I would like him or her to be.	1 2 3 4 5
3.	I have no choice but to feel hurt when critisized as a parent.	1 2 3 4 5
4.	I constantly worry that some harm may come to my child.	1 2 3 4 5
5.	I feel I must deal with discipline problems when they happen.	1 2 3 4 5
6.	Whether I am a good or a bad parent depends entirely on the way I was raised as a child.	1 2 3 4 5
7.	I get terribly upset when I see people treating their children differently than I would.	1 2 3 4 5
8.	I feel that there is only one right way to raise children.	1 2 3 4 5
9.	Parents must be loved by their children.	1 2 3 4 5
10.	If I am not a perfect parent, then I am a failure.	1 2 3 4 5
11.	When I say things to my child which I don't really mean I feel that I am basically a bad person.	1 2 3 4 5
12.	I constantly worry that I will make a terrible mistake as a parent.	1 2 3 4 5
13.	I have faith in my own ability to deal with most problems that I may encounter as a parent.	1 2 3 4 5
14.	I can learn from my experiences as a child and use them to become a better parent.	1 2 3 4 5
15.	I feel that there is a perfect solution to every problem I encounter with my child.	1 2 3 4 5
16.	When my child does something wrong I feel that I have failed as a parent.	1 2 3 4 5
17.	When I do something as a parent which I feel is wrong it means that I am a bad person and should be punished.	1 2 3 4 5
18.	It is terrible when I cannot give my child the things I would like to give.	1 2 3 4 5
19.	I feel that I have no choice but to feel angry when my child does something wrong.	1 2 3 4 5
20.	When I have a problem with my child I feel it is best to wait and see if it fixes itself.	1 2 3 4 5
21.	Whenever I have to make a decision concerning my child I ask someone for advise.	1 2 3 4 5
22.	I am constantly bothered by the problems other people have in raising children.	1 2 3 4 5

** TO WHOM IT MAY CONCERN **
Pages 90-94 are removed from this thesis.
The contents included:

Parenting Stress Index(Abidin,1986)
Reported Stress
Questions related to demographic variables



TIM STARKO